



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,730	09/09/2003	Vincent W. King	59003US002	2795

32692 7590 09/12/2006

3M INNOVATIVE PROPERTIES COMPANY  
PO BOX 33427  
ST. PAUL, MN 55133-3427

EXAMINER

DANG, HUNG XUAN

ART UNIT	PAPER NUMBER
----------	--------------

2873

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/658,730	<b>Applicant(s)</b> KING ET AL.	
	<b>Examiner</b> Hung X. Dang	<b>Art Unit</b> 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 11-21 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) 3-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

Art Unit: 2873

The indicated allowability of claims 1 and 2 are withdrawn in view of the newly discovered reference(s) to Brady et al (Patent Application Publication 2002/0177082 A1). Rejections based on the newly cited reference(s) follow.

### **Claims Rejection Under 35 USC - 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Brady et al** (Patent Application Publication 2002/0177082 A1).

Brady et al (Patent Application Publication 2002/0177082 A1) discloses in figure 1E a "microreplicated" article comprising: a flexible substrate 10 having opposed surfaces (see figure 3 which shows the substrate web on a roll 32, therefore, the substrate must be flexible in order to be on a roll, which is supported by para [0094] and para [0074] teaches polycarbonate substrate which is one of the materials taught by the Applicant on page 5, line 24 as a flexible substrate); a first "microreplicated" pattern cylindrical lenses 16 (with respect to claim 2 – see para [0074]); and a second "microreplicated" pattern 18 on the second surface, wherein the first and second patterns are inherently "registered" to within 100 microns in a cross web direction. The patterns are taught as being self-aligned based on their process of manufacture (see

Art Unit: 2873

para [0084]) and that the spacing of lenses was about 43 microns (see para [0096]) and that the edge of the substrate 10 web forms an inherent limit to where lenses may be formed because there is no material past the edge of the web (this statement is included to meet the applicant's special definition on page 3). Therefore, the microlenses 16 and the photoresist 18 must be "registered" to within 100 microns in cross web direction or the device would not be able to function by working as a rear projecting screen (see para [0001]).

First, it should be noted that "coated" in claim 1 refers to the process by which first and second "microreplicated" patterns are formed (see applicant's specification pages 8 and 9). This process limitation is given patentable weight inasmuch the final product is formed by the process steps. Therefore, "coated" is not given any weight because the final structure of the reference includes patterns that met the limitations of the claim. It should be further noted that Brady et al teaches forming the first pattern lenses 16 in a first layer (para [0076]), which may be considered as "coated" and the second pattern photoresist 18 is formed as a layer on substrate 10 (see para [0083]), which also may be considered as "coated".

The applicant's specification on page 3 provides various special definitions. However, "microreplicated" is given for a manufacturing process with variability between product to product. This part of the definition cannot be given patentable weight in the product claim 1 because it recites an article (ie, a single article) and the process of making multiple articles is a process step that has no weight on the final product of the

Art Unit: 2873

article recite in claim 1. Furthermore, the reference teaches that there was essentially no variation from run to run (see para [0099], last two lines).

### **Allowable Subject Matter**

2. Claims 11-21 are allowed.

Claims 3-10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Reasons For Allowance**

3. The following is an Examiner's Statement of Reasons for Allowance:

The prior art fails to teach a combination of all the claimed features as present in independent claim 11, which include a coating a first liquid on the first surface; contacting the first liquid with a first patterned roll; curing the first liquid to create the first microreplicated pattern; coating a second liquid on the second surface; contacting the second liquid with a second patterned roll while the first microreplicated pattern is in contact with the first pattern roll; and curing the second liquid to create the second microreplicated pattern, wherein the first and second patterns are registered to within about 100 microns in a cross-web direction.

The prior art fails to teach a combination of all the claimed features as present in independent claim 19, which include a coating a first liquid on the first surface, contacting the first liquid with a first patterned roll; curing the first liquid to create the first

Art Unit: 2873

microreplicated pattern; coating a second liquid on the second surface; contacting the second liquid with a second patterned roll while the first microreplicated pattern is in contact with the first pattern roll; and curing the second liquid to create the second microreplicated pattern, wherein the first and second patterns are registered to within about 100 microns.

The prior art fails to teach a combination of all the claimed features as present in independent claim 20, which include a first microreplicated patterned structure on the first surface and a second microreplicated patterned structure on the second surface, wherein the first and second structures are registered to within about 100 microns.

4. Any inquiry concerning this communication should be directed to Examiner Dang at telephone number (571) 272-2326.

8/06

A handwritten signature in black ink, appearing to read 'Hung Dang', with a stylized, looped end.

HUNG DANG

PRIMARY EXAMINER

TC 2800